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Amended Patent Claims

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1. (original) A method of digital image processing in CMOS camera images, characterized in that the variation in time of the output signal value g is a combination of the term c*g and the source term q and the calculation of the target signal value q comprises the subtraction of the term c*g from the variation in time of the output signal value g of the image data.

2. (original) The method according to claim 1, characterized in that for regions of the image data with high contrast, a parameter estimation or approximation is carried out.

3. (currently amended) The method according to ~~one of the claims 1 to 2~~ claim 1, characterized in that for the parameter estimation or approximation, the "total least squares" (TLS), "ordinary least squares" (OLS), "Mixed OLS-TLS" and/or variation methods is used.

4. (currently amended) The method according to ~~one of claims 1 to 3~~ claim 1, characterized in that the decay constant c and/or the object shift u is determined by parameter approximation from the image data.

5. (currently amended) The method according to ~~one of claims 1 to 4~~ claim 1, characterized in that the decay constant c is determined by calibration of the camera.

6. (currently amended) The method according to ~~one of claims 1 to 5~~ claim 1, characterized in that the differential equation (1)

$$\frac{dg(x,y,t)}{dt} = c(x,y,t)g(x,y,t) + q(x,y,t) \Leftrightarrow$$

$$\Leftrightarrow \frac{\partial g}{\partial x}u_x + \frac{\partial g}{\partial y}u_y + \frac{\partial g}{\partial t} - c(x,y,t)g(x,y,t) - q(x,y,t) = 0 \quad \text{.....(1)}$$

with

g = the gray value of the image sequence

u = object shift (vector field shift)

c = decay constant

q = source term (light) of interest

is used.

7. (currently amended) The method according to ~~one of claims 1 to 6~~ claim 1, characterized in that known object movements u_x and u_y are introduced directly into differential equation (1).

8. (currently amended) The method according to ~~one of claims 1 to 7~~ claim 1, characterized in that it is implemented by field programmable gate arrays (FPGA's).

9. (currently amended) A device for digital image processing in CMOS camera images, characterized in that it is suitable for carrying out the method according to ~~claims 1 to 8~~ claim 1.